

TWO NEW SPECIES OF *AGERATINA* (ASTERACEAE, EUPATORIEAE)  
FROM OAXACA, MEXICO

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ABSTRACT

Two new species of *Ageratina*, *A. cruzii* B. Turner and *A. kochiana* B. Turner, are described from Oaxaca, México. Both belong to the subgenus *Neogreenella*, the former most closely related to *A. etlensis*, the latter to *A. chimalapana*.

KEY WORDS: Asteraceae, Eupatorieae, *Ageratina*, México

Routine identification of Mexican Asteraceae has revealed the following novelties.

*Ageratina cruzii* B. Turner, *sp. nov.* TYPE: MEXICO. Oaxaca: Distr. Teposcolula, Mpio. San Pedro Topiltepec, Santa María Tiltepec, bosque de encino, 2350 m, 5 Nov 1990, *E. Cruz C. 321* (HOLOTYPE: TEX!; Isotype: CHAPA).

*Ageratinae etlensi* (B.L. Rob.) King & H. Rob. similis sed capitulescentia laxis valde terminalibus (vs. capitulis plerumque axillaribus congestisque), paginis inferis foliorum puberulis (vs. glabris), et capitulis ca. 10 flosculos efferentibus (vs. 20-25) differt.

Suffruticose perennial glabrous herbs or shrublets to 1.5 m high. Stems reddish, glabrous, the internodes longer than the leaves. Leaves opposite throughout, gradually reduced upwards, mostly 5-7 cm long, 2.5-3.5 cm wide; petioles 1.0-1.5 cm long; blades broadly ovate to subdeltoid, abruptly tapering upon the petioles, reticulate nervate, with 3 major nerves arising from above the base, the margins rather evenly crenuloserrulate. Heads numerous, arranged in terminal, relative lax cymes, the ultimate peduncles mostly 10-20

mm long, appressed-puberulent with uniseriate, purple jointed, hairs. Involucres 3.5-4.0 mm high, narrowly campanulate, the bracts biseriate, subequal, linear-lanceolate, glabrous or nearly so. Receptacle plane, glabrous, epaleate, ca. 1 mm across. Florets 10 per head (1 count), the corollas white, ca. 5 mm long, glabrous, the tubes ca. 1.5 mm long, the lobes glabrous, ca. 0.5 mm long. Achenes ca. 2.5 mm long, sparsely hispidulous, the pappus of 25-30 barbellate bristles 3-4 mm long, not enlarged apically.

According to label data, the plant is a herb 1.5 m high and is reportedly frequent at the site indicated.

*Ageratina cruzii* is superficially similar to the widespread highly variable *A. ligustrina* DC. It is readily distinguished from the latter in having leaves with 3 principal basal nerves (vs. pinnately nervate), nonpunctate, minutely reticulate surfaces (vs. rather smooth and punctate), and relatively minute involucres 3.5-4.0 mm high (vs. 5.0-6.0 mm). Its actual relationship appears to be with the poorly known *A. etlensis* (B.L. Rob.) King & H. Rob., also a species of the mountain ranges north of Cd. Oaxaca. *Ageratina cruzii* differs from the latter in having a pronounced naked lax capitulescence of more numerous smaller heads with fewer florets (ca. 10 vs. 20-25), as noted in the Latin diagnosis.

*Ageratina kochiana* B. Turner, *sp. nov.* TYPE: MEXICO. Oaxaca: Distr. Teposcolula, Mpio. San Pedro Topiltepec, Santa María Tiltepec, bosque de encino, 2350 m, 5 Nov 1990, *E. Cruz C. 280* (HOLOTYPE: TEXL; Isotype: CHAPA).

*Ageratinae chimalapanae* B. Turner similis in characteribus involucri ac achaeniorum sed valde differt foliis majoribus laminis ovatis triplinerviis (vs. lanceolati-ellipticis pinnatinerviis), et petiolis 10-20 mm longis (vs. 1-2 mm).

Suffruticose perennial herbs or shrublets 1.0-1.2 m high. Stems sparsely puberulent to glabrate. Leaves opposite throughout, mostly 2-4 cm long, 1.0-1.5 cm wide; petioles sparsely puberulent beneath, especially along the veins, the surfaces reticulate venose, moderately atomiferous glandular, the margins hispidulous, crenulate to nearly entire. Capitulescence of 10-15 heads arranged in terminal congested cymes, the ultimate peduncles 1-7 mm long, puberulent. Involucres campanulate, 4-5 mm high the bracts subgraduate, triseriate, the middle series strongly 2 nerved with raised ribs, ovate-elliptic, ciliolate marginally with soft tawny hairs. Receptacle plane, glabrous, ca. 1.5 mm across, epaleate. Florets 15-20 per head, the corollas white or pinkish, ca. 5 mm long, glabrous, the tube ca. 1.5 mm long, the lobes ca. 0.8 mm long, glabrous. Achenes (immature) ca. 2.5 mm long, hispidulous; pappus double, an outer row of 15-20 short, narrow bristles mostly 0.5-2.5 mm long, the inner

row of ca. 20 white to reddish barbellate bristles 5-6 mm long, their apices somewhat expanded.

ADDITIONAL SPECIMEN EXAMINED: MEXICO. Oaxaca: Distr. Teposcolula, Mpio. San Pedro Topiltepec, Santa María Tiltepec, bosque de encino, 2455 m, 22 Nov 1990, *E. Cruz C. 299* (CHAPA, TEX).

According to label data the plant is a shrublet 1.0-1.2 m high and reportedly frequent at the sites indicated. The type has relatively more linear-lanceolate leaves than the second cited collection, the former being 3.0-3.5 cm long, the latter 2.0-2.5 cm long (3-4 times as long as wide, vs. 2-3 times as long as wide, respectively), otherwise they are essentially identical.

The leaves of this species resemble *Ageratina seleri* B. Turner in size and shape, but those of the latter are velutinous beneath. Features of the involucre, corolla and especially pappus, however, appear to relate *Ageratina kochii* to *A. chimalapana* B. Turner of easternmost Oaxaca, both having a double pappus with the outer series much shorter, as in the *A. mairetiana* (DC.) King & H. Rob. complex (cf. Turner 1987, 1989) *Ageratina chimalapana* is readily distinguished from *A. kochii* by its leathery trinervate, broadly ovate leaves, the petioles 10-20 mm long.

It is a pleasure to name this very distinct species in honor of Dr. Stephen D. Koch, Director of the Herbarium at Chapingo, México (CHAPA) who has assembled a remarkable and varied collection of plants from throughout México.

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#### LITERATURE CITED

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